

# **MODEL: SDI06**

# 1 Input / 4 Output 3G/HD-SDI Video Distribution Amplifier

# **User Manual**



## **Precautions and Safety Guidelines**

Please read this user manual thoroughly prior to using this product

- Do not install the product in places having extremely low or high temperature conditions, those
  exposed to rain, snow, or high humidity, places containing or exposed to oil and gas, or exposed to
  vibration, shock, direct sunlight or exposed to outdoor weather conditions. Places exposed to radio
  waves (RF) or near to power lines. They may cause low performance or a product malfunction.
- · Do not disassemble the product or insert foreign objects.
- The unit may pose an electrical shock hazard. Take care not to get an electric shock while using the
  device.
- Only use safety approved power supply units with electromagnetic compatibility.
- Do not use and/or connect any devices inappropriate to the unit. It may cause a product malfunction or fire.
- Use this product only in the temperature range -10°C to +50°C.
- Prior to turning on the device, check the condition of the data cable insulation connected to external devices.
- Before installing the product, or applying power, check its voltage rating.
- Do not subject the product to physical shocks.
- Do not use the device if smoke or a burning smell is being produced. It may cause a fire. If any smoke
  or a burning smell is produced, immediately turn the unit off and remove the power cable. Contact
  your distributor and get the product checked.
- If the power does not turn ON, make sure the power cable is correctly connected.
- If the device does not work properly, please contact your distributor.

#### 1. Introduction

#### 1.1 Overview

This model is a single channel HD-SDI signal distribution amplifier. Using this device, you can split the HD-SDI signal input to up to four output signals. This device provides stable signal distribution and clear video images as each channel has a separate video chips.

#### 1.2 Features

- 1 input / 4 outputs
- No artifacts or other signal degradation/distortion
- Durable aluminum body with optimum shielding
- Possible to send Full HD signals up to 100m (using RG6 cable)
- · Re-clocker and equaliser included
- Supports SMPTE292M, SMPTE424M

#### 1.3 HD Signal Standards

- Our HD-SDI transmission solutions conform with the SDI signal standards of the SMPTE (Society of Motion Picture and Television Engineers)
- The SDI (Serial Digital Interface) is an innovative transmission system which cantransmit
  uncompressed video signals over a single cable. As SDI signals are digital, it is possible to transmit
  limitless distance without modification by equalising and reclockingat certain distance. Also, there is
  no aging or delay caused by compression.

SMPTE292M-HD-SDI	1.485 Gbps
SMPTE372M-Dual link - HD-SDI	2.97 Gbps
SMPTE424M-Dual speed - HD-SDI	2.97 Gbps

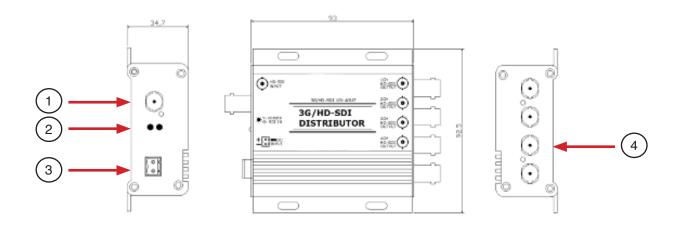
#### 2. Components

The following components are included in the package.

Model	Main Unit	DC Power Cord	Power Adapter	User Manual
Distributor	Onth Sold Control Cont			

# 3. Product Parts & Peripheral Device Connection

#### 3.1 Product Parts and Functions



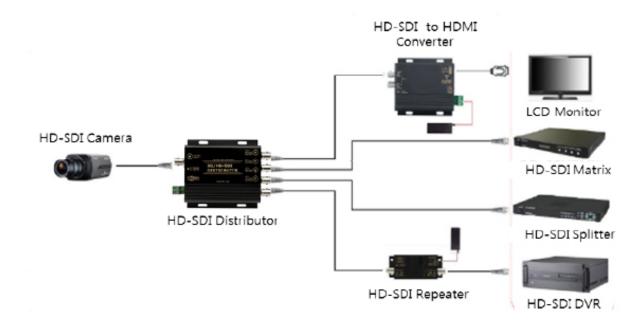
- (1) **HD-SDI IN**: HD-SDI Signal Input Port
- (2) LED Indicators

LED Indicator	Description
Yellow ON	Normal Power Supply
Green ON	Normal Operation (Input HD-SDI Signal)

- (3) **DC INPUT**: DC12V~48V (DC12V/0.167A [2W])
- 4 HD-SDI OUT (Channel 1 ~ 4): HD-SDI Output Port (Connecting with HD-SDI Receiver)

#### 4. Connection Diagram

- Connect an HD-SDI camera to this device (using coaxial cable) and then connect the device output ports with HD devices; such as HD monitor (with a converter), HD Matrix, HD Splitter and HD DVR.
- The maximum transmission distance between the distributor and other HD devices is 100m when
  using RG6 coaxial cable. Transmission distances are affected by the type of coaxial cable used, and
  the specification of HD receiving equipment.



#### 5. Transmission Distance

Cable	Transmissions Distance (m)		
	1.485Gb/s (HD)	2.97Gb/s (FULL HD)	
RG59	100	50	
CT125	150	70	
RG6	200	100	

- The above assume high quality cable specifications using copper conductor.
- We recommend only using 70% of the maximum distance stated above as there are other external factors which sometimes cause signal degradation.
- Only use BNC connectors with a low connection resistance.
- Avoid using excessive force when installing your coaxial cable
- · Never exceed the specified bending radius of the coaxial cable being used.

# 6. Specification

\* SMPTE292M, SMPTE424M

		Description	
Video In / Out		HD-SDI	
Input Power		DC12V ~ 48V	
Power Consumption		DC12V 165mA (DC48V 45mA)	
Maximum Transmission Distance		100m (Full HD), 200m (HD) with RG6	
Baudrate		270Mbps ~ 3Gbps	
Connect Power	HD-SDI In / Out	BNC-F (75Ω)	
	Video In	1 x IN	
	Video Out	4 x OUT	
LED	HD-SDI (Green)	ON : Receiving HD-SDI Signal	
	Power (Yellow)	ON: Working	
Temperature / Humidity		-10°C ~ +50°C / 0 ~ 80% RH	
Case Body / Weight		Aluminum / 240g	
Dimension W x H x D (mm)		93 x 92.5 x 34.7	

## 7. Warranty

This product has passed thorough quality control and test, and in the unlikely event of failure during normal use, we provide 12 months warranty service. This limited liability warranty is effective from the date of purchase.



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